



Public Health
England

Protecting and improving the nation's health

Rotavirus data 2006 to 2015 November 2016

National laboratory data for residents of England and Wales

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: [@PHE_uk](https://twitter.com/PHE_uk)
Facebook: www.facebook.com/PublicHealthEngland

Prepared by: Gastrointestinal Infections Department
For queries relating to this document, please contact: EEDD@phe.gov.uk

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Key Points

- During the winter months, reports of rotavirus activity are published weekly and are available here. Reports are published monthly during the summer months.
- The Second Study of Infectious Intestinal Disease in the Community (IID2 Study) was conducted in the UK during 2008-2009 and aimed to investigate the incidence of infectious intestinal disease (IID) in the community. Through this study, they estimated that for every one case of rotavirus identified national surveillance, there were 43 cases in the community (95% confidence interval of 30-62 cases)^{1,2}.
- In July 2013, a rotavirus vaccine was introduced for babies, alongside other routine childhood immunisations. Rotavirus activity demonstrably declined following this.
- Rotavirus particularly contributes to reported diarrhoea and vomiting illness in children aged under five and is often associated with outbreaks of diarrhoea and vomiting in nurseries and schools.
- Rotavirus infection in the UK is seasonal occurring mostly in winter and early spring (January to March).
- Data extracted are for England and Wales and are specimens taken from faeces and the lower gastrointestinal tract only.

Rotavirus data 2006 - 2015

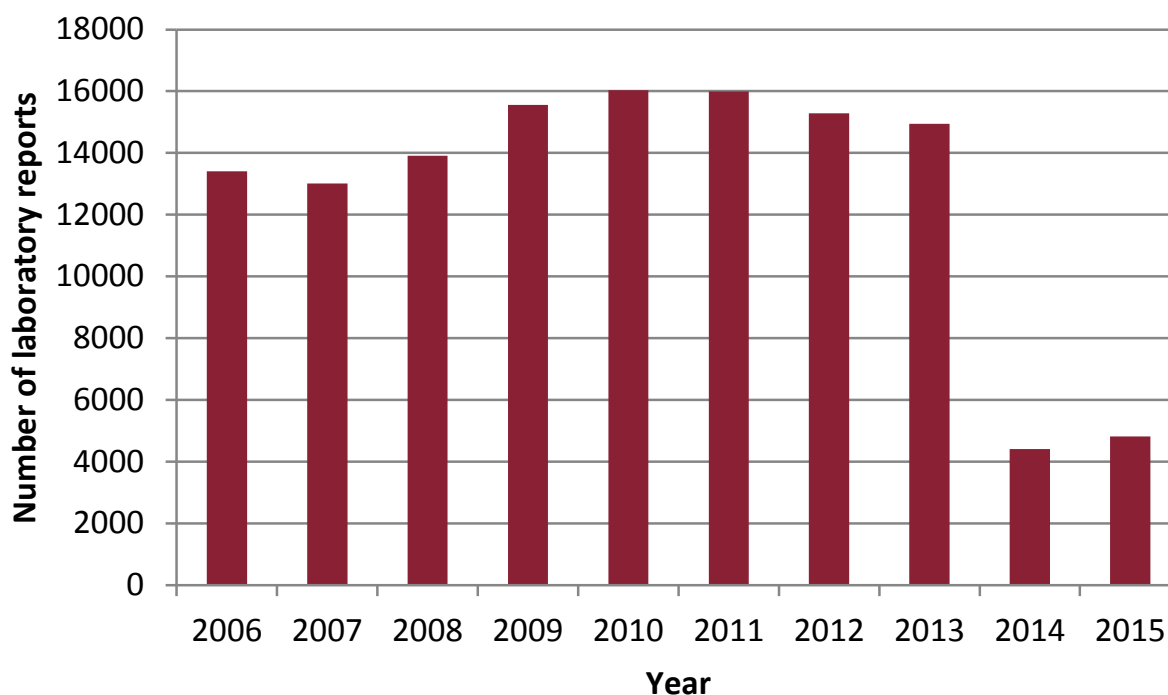
All data presented in this report are correct as of 29 December 2016.

1. Annual data (2006-2015)

Table 1 Annual laboratory reports of rotavirus in England and Wales

Year	Number of laboratory reports	Laboratory reports per 100,000 population
2006	13409	24.85
2007	13010	23.92
2008	13902	25.35
2009	15551	28.15
2010	16039	28.80
2011	15997	28.48
2012	15289	27.03
2013	14950	26.25
2014	4405	7.67
2015	4818	8.32

Figure 1 Annual laboratory reports of rotavirus in England and Wales



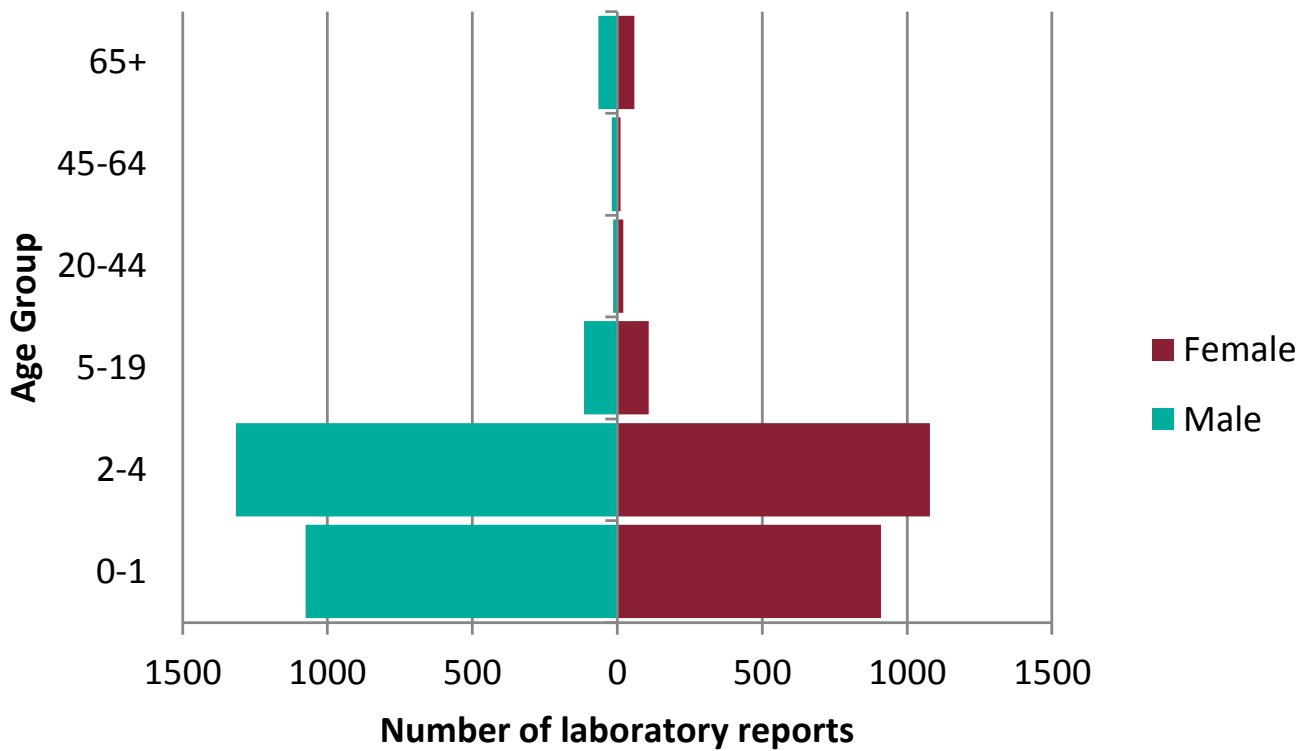
2. Regional Data (2015)

Table 2 Regional distribution of laboratory reports of rotavirus in England and Wales

Country	Region	Laboratory reports
England	East Midlands	360
	East of England	592
	London	529
	North East	368
	North West	431
	South East	512
	South West	683
	Yorkshire and The Humber	536
	West Midlands	388
Wales	Wales	419

3. Age/sex distribution (2015)*

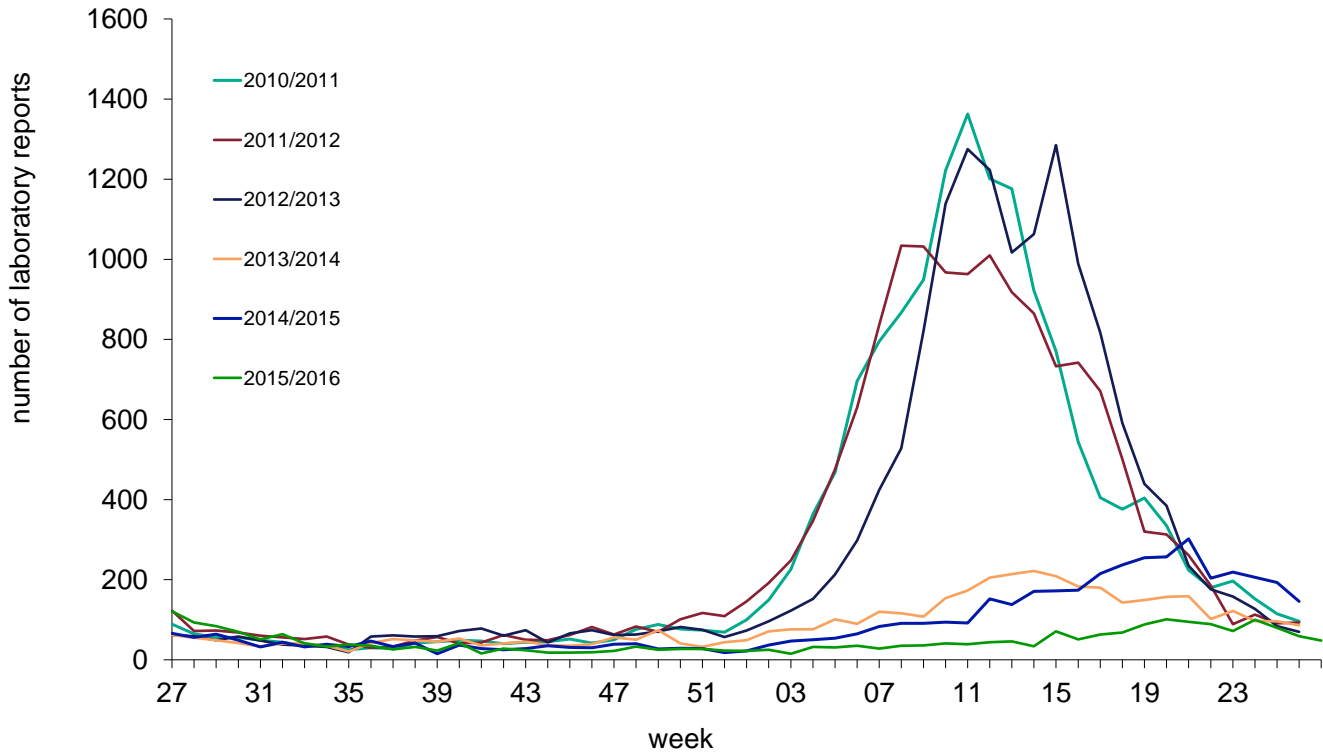
Figure 2 Age-sex distribution of rotavirus laboratory reports in England and Wales



*26 cases with unknown age and/or gender recorded.

4. Seasonal variation*

Figure 3 Seasonal comparison of laboratory reports of rotavirus in England and Wales



*In order to capture the winter peak of activity in one season, for reporting purposes, the rotavirus season runs from week 27 in year 1 to week 26 in year 2, i.e. week 27 2009 to week 26 2010, July to June.

Data Source

- Labbase2 (2006 to October 2014); Second Generation Surveillance System (SGSS) (November 2014 onwards). This is a live laboratory reporting system therefore numbers may fluctuate. Data provided in this report are new extractions from this system and provide updated figures to previously published reports. In 2014, PHE upgraded the laboratory reporting system so direct comparisons between data reported from the previous system (LabBase2) and the new system (SGSS) may require cautious interpretation.

References

1. Tam CC, Rodrigues LC, Viviani L, Dodds JP, Evans MR, Hunter PR, et al. Longitudinal study of infectious intestinal disease in the UK (IID2 study): incidence in the community and presenting to general practice. *Gut*. 2011;61(1):69-77.
2. Food Standards Agency. The second study of infectious intestinal disease in the community (IID2 Study). <https://www.food.gov.uk/science/research/foodborneillness/b14programme/b14projlist/b18021>. Accessed 15 Dec 2015.

Acknowledgements

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